

New combinations in *Senegalia* (Fabaceae: Mimosoideae) for Australia

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Abstract

Maslin, B.R. New combinations in *Senegalia* (Fabaceae: Mimosoideae) for Australia. *Nuytsia* 22(6): 465–468. The genus *Acacia* Mill. (*s. lat.*) is now regarded as comprising five genera, one of which is *Senegalia* Raf. This genus is represented in Australia by just four species, two native and two introduced. The following new combinations are made in order to facilitate the completion of a revised edition of the *Flora of Australia* Vol. 11: *Senegalia chundra* (Roxb. ex Rottler) Maslin, *S. pennata* (L.) Maslin and *S. pennata* subsp. *kerrii* (I.C.Nielsen) Maslin.

Introduction

Molecular and other evidence has shown that the former, broadly circumscribed genus *Acacia* Mill. is polyphyletic and is now regarded as comprising five genera, *Acacia* (*s. str.*), *Acaciella* Britton & Rose, *Mariosousa* Seigler & Ebinger, *Senegalia* Raf. and *Vachellia* Wight & Arn. (see Miller & Seigler 2012 for an overview of this generic classification). The pan-tropical genus *Senegalia* (syn. *Acacia* subgen. *Aculeiferum* Vassal) is represented in Australia by just four species, two native and two introduced. Names in *Senegalia* are available for two of these taxa, both of which occur in north Queensland, namely, the native *S. albizioides* (Pedley) Pedley (syn. *A. albizioides* Pedley) and the introduced *S. rugata* (Lam.) Britton & Rose (syn. *A. concinna* (Willd.) DC. and *A. sinuata* (Lour.) Merr.). New combinations in *Senegalia* are provided below for the remaining two species, one native and one introduced, in order that they may be available for use in a revised edition of the *Flora of Australia* Vol. 11 (Orchard & Wilson 2001) that is currently being prepared by the author.

The synonymy which forms the basis for this paper is that of previous authors whose works are referenced under the respective taxa below. None of the cited type specimens has been seen by the present author but reference is provided to other author's examination of types where these have been undertaken.

New combinations

Senegalia chundra (Roxb. ex Rottler) Maslin, *comb. nov.*

Mimosa chundra Roxb. ex Rottler, *Neue Schriften Ges. Naturf. Freunde Berlin* 4: 207 (1803); *Acacia chundra* (Roxb. ex Rottler) Willd., *Sp. Pl.* ed. 4, 4(2): 1078 (1806). *Type citation*: ‘Marmelon. Octobr. 1799.’

Mimosa sundra Roxb., *Pl. Corom.* 3: 19, t. 225 (1811); *Acacia sundra* (Roxb.) DC., *Prodr.* 2: 458 (1825); *Acacia catechu* var. *sundra* (Roxb.) Kurz, *Forest Fl. Burma* 1: 422 (1877); *A. catechu* subsp. *sundra* (Roxb.) Roberty, *Candollea* 11: 157 (1948) [Note: Roberty erroneously attributed the author of the basionym, *Mimosa sundra*, to De Candolle who cited *Mimosa sundra* Roxb. in his synonymy.] *Type*: ‘forests and mountains of Coromandel’, *Pl. Coromandel* 3: t. 225; *iconotype*; fide Ross (2001: 208).

Distribution. Myanmar (Burma), India, Sri Lanka and Reunion (introduced) (fide Roskov *et al.* 2005, as *A. chundra*). In Australia *S. chundra* is naturalised in a few places around Darwin where it is regarded as a noxious weed (fide Ross 2001: 208 and Navie & Adkins 2008: in these two works the species is treated as *A. catechu* var. *sundra*).

Notes. Despite their similar-sounding epithets, *M. chundra* and *M. sundra* were independent descriptions based on different types. Some authors (e.g. Roskov *et al.* 2005) have treated *A. sundra* (Roxb.) DC. as an orthographic variant of *A. chundra* (Roxb. ex Rottler) Willd., however, there is no indication in the protologue of the basionym, *M. sundra*, that this is the case. As discussed by Kshirsagar (2012) *Acacia* (*Senegalia*) *chundra* has had a complex nomenclatural history, sometimes being treated as a distinct species and sometimes treated as either a variety or synonym of *A. catechu*. Kshirsagar (*l.c.*) regards *A. chundra* as a distinct species and cites both *A. sundra* and *A. catechu* var. *sundra* in synonymy. It is this classification that is adopted here.

The synonymy adopted above follows that of Roskov *et al.* (*l.c.*) and Kshirsagar (*l.c.*) except that *A. catechu* var. *sundra* (Roxb.) Prain is omitted here. This name is given by Roskov *et al.* (*l.c.*) as a synonym of *Acacia* (*Senegalia*) *chundra*, based on Sanjappa (1992) who cites *A. catechu* var. *sundra* Prain, *J. Asiat. Soc. Beng.* 66: 508 (1897). However, the name var. *sundra* does not appear in Prain’s work; and although he did suggest that *A. sundra* could be considered a variety of *A. catechu* (or a cryptic species in its own right), he did not make the infraspecific combination.

Senegalia pennata (L.) Maslin, *comb. nov.*

Mimosa pennata L., *Sp. Pl.* ed. 1, 1: 522 (1753); *Acacia pennata* (L.) Willd., *Sp. Pl.* ed. 4, 4(2): 1090 (1806). *Type*: Herb. *Herman* 3: 7, no. 216; *holo*: BM; fide Nielsen (1981: 66 & 1985: 18).

Mimosa ferruginea Rottler, *Neue Schriften Ges. Naturf. Freunde Berlin* 4: 208 (1803). *Type citation*. ‘Madras in horto Anderson. Octobr. 23. 1799.’ Synonymy following Tropicos (2012).

Acacia pennata var. *heyneana* Benth., *London J. Bot.* 1: 516 (1842). *Type*: Wall. Cat. n. 5253A; *lecto*; fide R.P. Subhedar, *J. Bombay Nat. Hist. Soc.* 86: 271 (1989).

Acacia pennata var. *canescens* Graham ex Kurz, *J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist.* 45(4): 298 (1877) [1876 publ. 19 Apr 1877]; *A. pennata* var. *canescens* Graham ex Baker, in J.D. Hooker, *Fl. British India* 2: 298 (1897); *Acacia canescens* (Graham ex Kurz) Gamble, *Fl. Madras* 1: 304 (1918). *Type*: Wall. Cat. n. 5256.

Notes. *Senegalia pennata* is a widespread species that ranges from Indonesia and southern China eastwards to India (Roskov *et al.* 2005, as *Acacia pennata*). It comprises four subspecies but only subsp. *kerrii* occurs in Australia. The combinations for the other subspecies will be published elsewhere (Maslin in prep.). Except for *Mimosa ferruginea* the synonymy adopted here follows that of Nielsen (1981, 1985).

Senegalia pennata* subsp. *pennata

Distribution. Andaman Is., Bangladesh, Bhutan, India, Myanmar (Burma), Nepal, Sri Lanka and Thailand (Roskov *et al.* 2005).

Senegalia pennata* subsp. *kerrii* (I.C.Nielsen) Maslin, *comb. nov.

Acacia pennata subsp. *kerrii* I.C.Nielsen, *Adansonia*, sér. 2, 19(3): 353 (1980). *Type*: Thailand (Chiang Rai, Mae Suai), 25 July 1967, K. Bunchuai & B. Nimanong 1430; *holo*: K; *iso*: BKF, C, P (Note: The preceding isotype listing is taken from the protologue, however, isotypes are given in Nielsen 1981: 68 as BKF & C and in Nielsen 1985: 18 as BKF, C & E).

Acacia tomentella Zipp., *Linnaea* 15: 199 (1841). *Type*: Timor, *s. coll.* (Zippel?), Herb. Lugd. Bat. no. 908.2 ... 725; *holo*: L; fide Nielsen (1985: 19).

Acacia tomentella forma *minor* Miq., *Fl. Ind. Bat.* 1(1): 14 (1855). *Type*: Timor, *s. coll.* (Zippel?), Herb. Lugd. Bat. no. 508.2 ... 739; *lecto*: L; fide Nielsen (1985: 19).

Distribution. Within Australia subsp. *kerrii* is endemic to Cape York Peninsula, in northern Queensland. It also occurs in Bhutan, Cambodia, East Timor, southern China (Yunnan), India, Indonesia (Java; Lesser Sunda Islands – Flores, Komodo, Lombok and Sumbawa; south-western Sulawesi – Bonto Parang), Laos, Malaysia, Myanmar (Burma), Nepal, Sri Lanka, Thailand and Vietnam (Roskov *et al.* 2005; Wu De-Lin & Nielsen 2010).

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